CC: 96-45

COUNCIL FOR EDUCATIONAL DEVELOPMENT AND RESEARCH

May 7, 1996

The Honorable Reed E. Hundt
Chairman
Federal Communications Commission
1919 M Street, N.W., Room 814
Washington, D.C. 20554

RE: Federal-State Joint Board on Universal Service
(CC Docket No. 96-45) Reply Comments

Dear Mr. Chairman:

We have reviewed the recommendations of several organizations and businesses regarding the implementation of Section 254(h) of The Telecommunications Act of 1996, known as the Snowe-Rockefeller-Exon-Kerrey provision and submit the following comments on behalf of rural schools.

In an April 26, 1996 letter to you, these Senators state that one of the Act's principal goals is to provide schools and libraries with affordable *access* to telecommunications, with specific attention to the needs of rural areas. We applaud the Senators' statement that "we should not let a two-tiered education system develop in which wealthier school districts train students on advanced telecommunications technologies, but rural areas and poorer school districts are left out."

I. Some comments suggest that the Joint Board should further study and delay implementation of the intent of Congress. We urge the Board to move quickly to provide for the prompt delivery of modern telecommunications to schools. Rural schools, many of which are already at a disadvantage, will suffer even further from a delay.

Rural and small-town schools, make up 45 percent of all schools in the nation (National Center for Education Statistics, 1994). For much of rural America, the route to the information highway will lead from these schools. Rural schools differ from urban schools. These differences are more than a footnote to history. They constitute unique strengths that in many cases make rural schools effective in educating their children and youth. Nonetheless, these traits--small size, closeness to community, and a more holistic version of schooling--have not always been prized as strengths (Theobald & Nachtigal, 1995).

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In fact, over a century of effort has sought to make rural schools look like urban and suburban schools--larger, more removed from communities, and more specialized (Sher 1977, 1994). This push, which continues, has been only partly successful. Rural and small-town schools are still about half the size of urban and suburban schools; they are still centers of most rural and small-town communities; and they are less likely than urban schools to sort and specialize students and teachers (Stern, 1995). Today the issues that confront rural and small-town schools are very different from the issues that school reformers saw in 1900. The twenty-first century perspective values small school size, close ties to the community (including the intergenerational and neighborly ties known as "social capital"), and a holistic ("authentic") view of schooling and its purposes. For one thing, this constellation of virtues facilitates the flexibility necessary to respond successfully to rapid change.

Access to technology in rural and small-town schools should accommodate the endemic strengths of small scale, strong relationship with communities, and a more holistic (or inclusive) view of education. Whereas efforts in previous decades too often served to undermine such virtues, technology can and should be applied to cultivate these endemic, but still threatened, strengths. That is, technology ought to serve as a means of local empowerment for rural schools and communities, not as a further instrument of disenfranchisement. Technology ought to enter the rural circumstance in order to preserve it, not to contribute further to its destruction (Howley & Howley, 1995). Technology need not be used to bring an urban education to the country; it can, however, be used to achieve education parity by pooling the capabilities of small rural schools to their advantage.

Rural communities seeking to develop information-age economic infrastructures need to have in their midst one major telecommunications anchor to ensure the feasibility of the project. State governments have served as telecommunications anchors for some large-scale systems, but in small rural communities, the school is the central institution. If any single institution stands at the rural crossroads and defines community, it is the rural school. Rural schools are major employers and creators of value-added human capital for community development; their facilities shelter community life; and they are a major focus of community politics and policymaking.

As the NITA, in its September 1995 report, pointed out, "High-speed and very-high-speed computer networking service could effectively support the transmission of voice, data, and video information. Theoretically a single infrastructure could be used to extend the National Information Infrastructure into rural areas." The report added, "Historically the deployment of telecommunications capabilities in rural areas has been

delayed relative to deployment in urban areas. This has been due to the inability of rural areas to compete with urban areas for capital, since rural areas do not offer as high a return on investment." The report notes that "Government regulations and policies will play an essential role in the development of the Rural Information Infrastructure. Different regulations and polices will likely be required in rural areas..."

Through the Universal Service Fund, the FCC has the capability to provide incentives for rural telecommunications infrastructure development, focusing on schools as anchor tenants. By doing so, it would ensure deployment of today's and future technologies in a manner that would bring rural communities into the information age while still allowing them to maintain their unique strengths. We urge the Joint Board to provide for the prompt delivery of modern telecommunications to all schools and libraries, taking into consideration the special needs of rural areas.

If the Commission establishes a separate commission, or splits its deliberations about services to schools and libraries into separate proceedings, as some comments have suggested, the implementation of the intent of Congress will be delayed for years. The effect will be to further delay the capability of rural schools to use advanced telecommunication service as a way to maintain high quality programs and to meet the demanding academic standards being set for their students. Already colleges are demanding high-level course work at the secondary level as a qualification for admissions. Many small rural schools do not have the means to employ certified teachers to teach foreign languages and advanced science and math subjects, but they can gain access to them through interactive telecommunication technology. However, the increased academic demands and a delay in giving rural schools access to telecommunications will spell disaster for the long term viability of maintaining schools in rural communities and push toward another wave of school consolidations.

We do not agree with suggestions that it is premature to rule on what special or additional advanced services should be supported under this law. The law allows no time for such deliberations. The law sets a tight timeline for the Commission decisions and then requires periodic review of the evolving level of service. We propose that this review occur not less than every two years. This would assure that schools have available to them an up-to-date menu of discounted services.

Furthermore, we propose that the special telecommunication services be defined to consist of all advanced services that are commercially available in urban areas.

Section 254(b)(3) of the Telecommunications Act defines the level of services that rural areas are to have which "... are reasonably comparable to those services provided in urban areas... ."

II. The Telecommunications Act established an obligation to provide affordable universal service, not a block grant or voucher program, and not additional bureaucracy to administer it, as some have suggest. We urge the Joint Board to maintain the procedures by which the Universal Service Fund is dispersed.

Section 254(h)(1)(B) requires carriers to provide services to all schools at discounted rates. We believe that the law does not permit or intend to permit the use of a grant-like mechanism to administer the discounted rates. We are well aware that rural schools, along with other schools, need equipment and professional development. We believe, however, that these needs should not be confused with the law's requirement of affordability and access to services. (Should the Joint Commission determine that the needs for equipment and professional development are so great that it is impossible for some schools to meet the access goal without first attending to these investments, we suggest that the Commission take up this concern after the appropriate discounts for basic and advanced services have been determined for schools. This consideration should not delay consideration of the central focus of the bill, which is to provide schools and libraries affordable access to telecommunications.)

A March, 1996, Congressional Research Service report (96-178) indicates that the ongoing annual costs of supporting technology will be roughly 20 percent of the initial cost of purchasing the equipment —forever. This includes maintaining computers, upgrading equipment, acquiring connections, upgrading software, and training teachers. While we believe that there is a meritorious case to be made for supporting schools up-front expenditures and other costs, the thrust of the Snowe-Rockefeller amendment was clearly on setting a precedent for the Universal Service Fund to support school discounts for a high-quality menu of services from which schools could choose to improve the delivery of education to students. There are other mechanisms, such as leasing and finance strategies, to help schools leverage lower-cost loans from the private markets for infrastructure investment. There are evolving programs to support lowered costs for equipment, state programs to support infrastructure investments, and a variety of federal programs designed to provide high quality professional development. Many of these ongoing expenses have traditionally been the responsibility of the local and state budgets. What is not now part of those budgets is the cost of the connections once the infrastructure is in place.

For the long term financial and educational well-being of schools, it will be more advantageous to have available a up-to-date set of special services at a discounted rate that give schools rapid and high quality access to the information highway they can use to phase in technology investments according to their needs.

Technology should reinforce, rather than undermine, the unique strengths of rural schools. Therefore, we take exception to several proposals put forward in other filings.

- Rural schools will not be well served if State Education Agencies (SEAs) are delegated the authority to determine the menu of telecommunication functions available to schools or to approve school plans for using Universal Service Funds. Some filers have proposed this option. While SEAs serve many legitimate purposes well, they have neither the mechanisms nor are the responsiveness to assess, recommend, or determine the particular technological needs of particular rural schools and districts. Rural places are simply too diverse and the role of the SEAs in replicating an urban model of schooling is too entrenched in many places. To insert SEAs into the process would add an unnecessary layer of bureaucracy between schools and the particular services and products they really need. The role for the SEAs in technology is adequately provided for through other federal programs and state authorities. Instead, we recommend that the procurement process for telecommunications services follow rural schools' usual bidding procedures for contracting services and that this constitute a "bona fide" request as required by law. We do not agree with some commentators who have translated the requirement for a "bona-fide" request to mean that a third party should "qualify" it before a rural school can make a telecommunications investment.

- Rural schools will not be well served using a per-pupil system of allocating Universal Service Funds to schools. Under this scheme, the largest schools would receive the most support, whereas the smallest schools would receive the least. The Commission must recognize that schools of any size undertake certain functions that come with the institutional role; even the smallest high schools usually have sports teams and yearbooks, for example. Telecommunications is one of these essential institutional functions in the 21st century. Without such functionality, small schools will be forced to close. This might be desirable if bigger schools were known to produce higher achievement than small schools, but this is not the case. The per-pupil allocation method would constitute a *de facto* endorsement of large schools as opposed to small schools at just the time when national associations such as the National

Association of Secondary School Principals and urban education experts are specifically endorsing the value of small schools in urban areas. Further, west of the Mississippi River many areas are so sparsely populated that consolidation is not a practical option. It is for these "necessarily existent" schools that this legislation can prove to be of critical importance.

- Rural schools will not be well served by the Commission specifying the technology that they should use (e.g., 56Kb lines and toll-free access to point-of-presence for rural schools). A recommendation of this type will become obsolete in short order and quickly relegate small schools, rural schools, and poor schools and districts everywhere to second-class service. This approach, is, in effect, analogous to the "basic foundation" funding programs devised in the late 19th century to offer slightly more than local support to schools. Such specifications are incommensurate with the vision of equity embodied in the Act.

- Rural schools will not be well served if the alternative to the competitive benchmark rate, as proposed by some filings, uses the Total Service Long Run Incremental Cost (TSLRIC) as the basis for applying educational discounts. There are two fundamental flaws with this proposal. First, the incremental cost as variously determined among states and among companies is a moving target subject to the manipulation of the telecommunications carriers supplying the data. There are no absolutes. Regulatory bodies would quickly find that incremental costs as reported would be artificially raised to offset any discount applied. Second, this proposal does not address the fundamental pricing disparity between small, community-minded carriers who currently price their distance learning services at affordable rates, and many larger carriers, who do not wish to provide specific distance learning services to schools and purposely price their services out of schools' range. Applying a singular discount to such disparate rates would not achieve the end-product intended.

- Rural schools will not be served well if they do not have affordable access to the Internet and sufficient bandwidth to make use of special high-end services. Currently many schools and libraries pay commercial rates. Many rural citizens must make an expensive toll call to connect to an Internet access point.

We suggest that universal services policies be flexible enough so that schools can become "anchor tenants" and provide the community with access to telecommunications services. Currently, some communities, such as the one served by Mendocino Unified School

District in California, share the costs of bringing in advanced telecommunication services. We encourage an examination of the Mendocino filing and urge that Universal Service Fund policies be carefully shaped so as not to break up current cost-sharing arrangements in rural communities. We support aggregation of services that will help pool demand and attract outside carriers to rural areas. Allowing this aggregation among a local non-profit hospital, local government, and higher education institutions should not be considered the sale or resale of telecommunications services so long as the network is predominately used by public institutions for educational purposes.

III. In response to filings that offer suggestions for encouraging competition, we suggest this set of guiding principles to assure rural school access to affordable telecommunications that will encourage competition while at the same time assuring affordability and access to services.

IN SUPPORT OF THE COMPETITIVE BENCHMARK METHODOLOGY:

The suggestion was made that a national median price for each special distance learning service be determined by calculating the average price for each service in areas that now have effective competition (such as large suburban school districts). Similarly, a national median commercial rate could be used as a surrogate for the competitive price for those services that are commercially available in competitive markets but not yet widely adopted by schools. This method could reasonably serve as the benchmark price to which a "standard of affordability" or "discount" could then be applied. Whether that discount is at a rate that insures "affordability" by 90-95% of the potential school district users or is determined by another means, the process is fundamentally sound. The carrier would have the prerogative to demonstrate to the regulating body the differential between the "fully allocated cost" (which is far less susceptible to manipulation than incremental cost) and the discounted rate, with the carrier being compensated for the residual through the universal service fund.

This procedure will permit new service providers to compete for business against local exchange carriers. For example, if the costs of removing asbestos in old rural school buildings is very high, wireless technology may be a cost effective competitive alternative in the education market. Once in place, such providers would have a base from which to expand their services to surrounding rural areas, thus helping to bring competition into a rural community.

ABANDONMENT OF 'PRICING BASED ON COST':

In order to adhere to the spirit of Section 254(h) of the Telecommunications Act of 1996, there is a fundamental departure called for — away from pricing based on provider cost of service and toward pricing based on affordability for the end-user. The point should also be made that to price at a level that would encourage adoption of all distance learning technologies, whether or not there is a justified need, would be doing a disservice to the adopter school as well as to the telecommunications carrier. There clearly should not be a prescribed set of telecommunications services that all schools will be assumed to adopt.

ACCESS TO 'SPECIAL SERVICES' MUST BE INSURED:

Quite apart from the issue of affordability is the issue of access. There must be a mechanism for insuring that rural school districts have access to special telecommunication services irrespective of the willingness or immediate infrastructural ability of any potential carrier to provide those services. A major problem for rural schools is the lack of tariffed T-1 or broadband distance learning services from any carrier. The scenario that often follows is a two- to three-year negotiation period with a carrier to provide a service for which only Individual Case Based (ICB) tariffs are subsequently filed, subject to the whims of incremental or fully allocated costing methodologies. The ultimate pricing is such as to make the service unattainable by even financially endowed districts. Market forces cannot be assumed to insure access to special services such as compressed or broadband video. The notion of a "Distance Learning Carrier of Last Resort" should be investigated.

EXPANDING THE DISBURSEMENT OF UNIVERSAL SERVICE FUND PAYMENTS TO INCLUDE "NON-BASIC" SERVICES:

Traditionally Universal Service Fund payments have only been applicable for so-called basic services. It is not appropriate to view the inclusion of special services as an extension or redefinition of basic services. Doing so would infer that there is a set of telecommunications services that every school, library, and hospital would have a universal obligation to implement. The process of continually redefining "basic telephone service" (to include new and accepted technologies) will divert from the real issue of insuring affordable access to any of several technologies selected by individual schools on the basis of local need. Alternatively, there should exist a menu of special services from which individual adopters can choose.

A DISCOUNT WHICH FALLS BELOW THE ARTIFICIAL FLOOR:

If left to their own devices, state regulatory bodies will likely preserve the artificial floor for discounted rates, that is, that no educational discount will fall below the carrier-determined incremental cost. This notion must be abandoned if there is to be affordable access to special telecommunications services for rural schools.

DEFINITION OF 'SPECIAL SERVICES':

While it is agreed that the definition of special services should emphasize functionality (that is, Internet connection, two-way interactive television, etc.) rather than specific transmission media, (e.g., T-1, ISDN, DS-3, ATM, etc.), it must also be recognized that bandwidth is most often the determining factor in the quality of the service. While it is possible to conduct two-way interactive video over 56K lines, its quality (and full functionality) is impaired as compared to interactive video over DS-3. A menu of special services, which would include all currently implemented telecommunications technologies, each with varying benchmark prices but standard discounts, should be implemented.

INTERCONNECTIVITY OF TECHNOLOGIES SHOULD BE INSURED:

It is not sufficient to make "special services" accessible and affordable; they must also be interconnectable with other users, for instance, a cluster of schools implementing an ATM-based two-way interactive video network must be insured that its signal is interoperable with an adjoining T-1-based cluster without loss of system functionality. Without this additional component being part of telecommunications carriers' basic rate structure, the information superhighway will end up as a dead-end road.

Not every school will want the same services nor will they all want them all at the same time. Schools should have the option of affordability so that they can afford to buy the services that they are ready to integrate into their school program. We are not asking for free services. In fact there is a history where the federal government provided state-of-the-art equipment only to find it sitting in school classroom closets unused because teachers did not know how to use it.

Services for which value is exchanged tend to be planned carefully and used in the classroom. Allowing schools to participate in the market will mean that these services, even at affordable rates, will have to be justified to their communities as legitimate education costs. As a result, schools will use what they need and phase in more expensive services when they are ready to integrate them into their educational programming. This market mechanism of choice will help assure that services are provided and designed to meet school needs into the future.

We appreciate your consideration of these views.

Sincerely,

Dena G. Stoner
Executive Director
Council for Educational Development and Research

with:

Organizations Concerned about Rural Education, Washington, DC.
Missouri Interactive Telecommunication Education (MIT-E Network), Fayette, Missouri
Consortium on School Networking, Washington, DC.

cc: Office of the Secretary, Federal Communications Commission
Federal-State Joint Board
International Transcription Service
Ernestine Creech, Common Carrier Bureau

Attachment: Cited Sources and Resources

Cited Sources and Resources

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